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GENERAL EDITOR

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PREFACE

The evidence of coin has been immense in dating cultures revealed in Indian excavations of recent years. Being found in stratified deposit and being themselves objects dated or datable coins have helped to fix the date of the parent stratum and along with it all the associated industries, varied and mostly of indeterminate date. Besides, the association has helped to knit together widely distributed industries and fix them to set patterns of culture. Apart from that a coin in a stratigraphic context is sometimes of great significance. It stands for certain forms in life and thus is a culture criterion. All these points have been dealt with in this paper on the basis of the evidence obtained from archæological excavations carried in India during the last twenty years or so, excavations in which an emphasis on stratification was laid. To illustrate my thesis, I have depended *only* on published materials which are subject to check.

I am thankful to the Director General of Archæology in India for permitting me to express my views. My thanks are also due to Sri M. D. Puranik, Draftsman, Department of Archæology, Western Circle, Baroda, who has prepared the accompanying map and charts. I am beholden to Dr. A. K. Narain, M. A., Ph. D., Editor, Journal of the Numismatic Society of India who took a keen interest in my work. But for him my thoughts of leisurely hours could not have found a place in the society of learned scholars. Srimati Puravi Ray assisted me in numerous ways to prepare the dissertation and I am deeply grateful to her.

Baroda

1st May, 1959.

S. C. Ray.

STRATIGRAPHIC EVIDENCE OF COINS IN INDIAN EXCAVATIONS AND SOME ALLIED ISSUES,

The importance of coins in the study of Ancient Indian History and Culture is quite well known. Some scholars have shown how valuable coins are for studies in the fields of religion, iconography and art, others have stressed their importance from the point of view of social, political and economic history. Some coins record events or facts of considerable consequence relating to certain persons, dynasties or regions. Besides the valuable information supplied by the legends and metals of the coins, the fact of their mere circulation (or non-circulation) also at times is of great significance. The findspot of Kushāṇa coins in Uttar Pradesh in large numbers, over a considerable area and at a number of sites, is a most convincing evidence for the Yüeh-chi occupation of the territory; stray finds of the same in lower regions of the Gangetic delta may speak for the influence of the empire as far east as Bengal, while a chance find from a corner of Europe will attest only to the existence of a trade relation between two continents in a period not far removed from the death of Christ. Roman gold coins recovered from coastal India will corroborate the aggrieved feelings of Pliny while withdrawal of a valuable mint from the secluded vale of Kashmir at a certain period may tell an exactly reverse story for India at Central Asia.

Apart from the importance stressed above, the coin in recent years, has come to play a very significant and a somewhat different role in Indian archæology. It has, more than anything else, helped to determine chronology in archæological excavation when its presence in a particular stratum (a firm layer and not a mere dump) has fixed up the date of the same along with other objects found in association and has secondarily made it possible to fix up other phases of occupation also in a chronological sequence in relation to one thus already fixed. The presence of a coin in vertical excavation therefore is of immense value to an archæologist. This however does not mean that in an excavation of a more or less horizontal nature the evidence of coin is negligible. The content and provenance values of the coin would remain unaffected. And for the purpose of dating, the evidence of coin may be useful even in an horizontal digging. A gold coin of Kumāragupta I was found on the top of a floor level of monastery site No. 4 at Nālandā¹. The particular building therefore is likely to be of the same broad chronological horizon or it may be slightly earlier in date. Similarly, a gold coin of Gahaḍavāla king Govindachandra (1114-1154 A. D.) was found from the middle of the three levels from the top at a depth of 4'6" at site No. 1 at Nālandā and this presumably indicated

1. *Annual Report, Archaeological Survey of India, 1928-29, p. 145.*

the latest phase of building operations at that monastery¹. But in horizontal excavations, the evidence of coin for the purpose of dating can be taken recourse to only to a very limited extent. It is only when the coin is found in association with a certain structural level, that it has any value for determining the chronological position of the latter. If the coin is found, say in a deposit, a deposit which may be occupational but devoid of any structural activity, the coin loses most of its chronological value. A coin of Śrī Vighraha found at Nālandā at a particular horizon, without any relation to a building and recorded in measurements of mean sea level does not speak of anything more than that some 'unknown' phase of Nalanda coincided with the date of the Śrī Vighraha coin. Besides, in a horizontal excavation, it is not possible to distinguish an occupational deposit from a mere dump. In a monocultural site if the coin cannot be assigned to a definite occupational stratum, it may not matter very much, but in multicultural one the consequence will be rather considerable. Inability to assign a coin to a particular stratum may mean to deprive wholly the very stratum of getting a date, unless other datable objects are found in the same layer; whereas a misplacement will be still worse involving a wrong conclusion in dating a culture. A horizontal excavation is likely to yield comparatively large number of datable objects, but in a vertical one, dated objects are few and mainly coins, and sometimes coins alone, are the only objects that can be utilised for determining date. The importance of proper assignment of coin in a vertical excavation thus cannot but be overemphasized.

How the evidence of coin has helped to fix up a time table of different cultures of ancient India will become apparent, if a review is made of the principal archæological excavations undertaken during the last twenty years. The first dig in India where some amount of emphasis was laid on the method of stratification was undertaken at Ahichchhatra during the years 1940-44. The different cultural strata revealed from the excavation were as follows—IX (before 300 B.C.), VIII (B.C. 300 to 200), VII (B.C. 200 to 100), VI and V (B.C. 100 to A.D. 100), IV (A.D. 100 to 350), III (A.D. 350-750), II (A.D. 750 to 850) and I (A.D. 850 to 1100). Whereas no coin was found from the lowermost stratum, the date of the others were fixed almost exclusively from the evidence of coins. VIII revealed a fairly large number of round cast coins with simple symbols, VII square cast copper coins with more elaborate symbols in addition to the round ones; in VI and V Pañchāla Mitra coins were met with along with copper cast coins. Stratum IV revealed coins of the Kushāṇas, and the last stage of this phase contained imitation Kushāṇa coins as well. III yielded in its earliest stage the interesting coins of Acyu. II did not yield any other specimen and from stratum I came more than 200 so-called Indo-Sassanian coins of Ādivarāha and Śrī Vighra. These were met with in three different hoards below the walls of a house where they must have been deliberately buried by the owner of the

1. *Ann. Rep., A.S.I., Eastern Circle* 1916-17, pp. 40-41; S. C. Ray, *On coins recovered from Nalanda Excavations*, *J.N.S.I.* Vol. XVIII, pp. 101-7.

house as well as in stray finds all over the stratum¹.

The precise date of the cast copper coins cannot be fixed, but it is reasonable to presume that they were current in the period ranging from the 4th to early 2nd century B.C. since they are found in association with punch-marked silver coins at a number of sites². Besides, as Allan points out, stylistically, the copper cast coins are predecessors of the inscribed coins of many classes, which cannot be earlier than the second-first century B.C.³ For the date of the Pañchāla Mitra coins, found in the heart of Pañchāla, there is the evidence of palæography, since the coins are inscribed, and on this basis they may reasonably be assigned to a period ranging from the 2nd century B.C. to 1st century A.D.⁴ With Kushāṇa coins one reaches a somewhat firm date in spite of the divergent views on the chronology of the dynasty. The imitation Kushāṇa coins were popular issues in North India for a century or more after the fall of the Imperial Kushāṇas. 'Acyu' may be considered to be the issue of a contemporary of the Gupta king Samudragupta mentioned as Acyuta in the Allahabad pillar inscription⁵. The Ādivarāha coins of Gurjara Pratihāra king Mihira Bhoja are too well known and the date of the Śrī Vīra coins falls more or less in the same chronological horizon.

Coins played a very important part in dating the strata of Ahichchhatra because except coin, virtually no other datable antiquity was found in the excavation. About the sculptures found there, as Ghosh remarks, "their dating rests only on stylistic grounds."⁶ Most of the pottery specimens found at Ahichchhatra were not datable at the time of the excavation in view of the limited knowledge which the archæologists at that time had about ancient Indian pottery.

Ahichchhatra was followed by excavation at Taxila, in 1944-45⁷. The evidence of coin-finds was greatly helpful in determining the date of the fortification and of the four successive phases of structures found at Sirkap. From the prestructural levels came Taxila coins of various

1. A. Ghosh and K. C. Panigrahi, "The Pottery of Ahichchhatra, District Bareilly, U. P.," *Ancient India*, No. 1, pp. 37-40.

2. Alexander Cunningham, *Archæological Survey Reports*, XII, p. 40; XXII, p. 114; XI, p. 51; XVII, p. 89; XXII, p. 103; XI, p. 25; II, p. 261, 288; *Ann. Rep.*, ASI, 1913-14, p. 210, pl. LXIV, 22f. In the above noted sites, the term in association, however, is to be taken in a restricted sense, since the finds were not made from scientific and closely observed excavations. But recent stratified diggings have also shown that the two were interlocked at a number of sites. Regarding the date of punchmarked coins see below.

3. J. Allan, *Catalogue of the Coins of Ancient India*, Inter., p. LXXVII

4. J. Allan, op. cit. p. cxx; A. Ghosh, "Coins of Varuṇamitra from Ahichchhatra," *J.N.S.I.*, Vol. V, 1943, pp. 17-18

5. It is significant that no Gupta coin was found at Ahichchhatra which must have been in a flourishing state at that period. At Kauśāmbī also, coins of Gaṇendra (Gaṇapatiṇāga) identified as another adversary of Samudragupta referred to in the Allahabad Pillar inscription, were found from excavations of a stratum belonging to about the middle of the 4th century A.D. (*Annual Bibliography of Indian Art and Archaeology*, Vol. XVI, 1958, pp. XXXVIII-XXIX), but no Gupta coin was recovered. It is not unlikely that issues of these local monarchs were being used as media of currency even under the Gupta rule.

6. A. Ghosh and K. C. Panigrahi, op. cit., p. 39.

7. A. Ghosh, Taxila (Sirkap), 1944-5, *Ancient India*, No. 4, pp. 41-84.

types which as Ghosh puts it, "are by themselves undatable." These coins were also met with in later phases proving their long currency at that site. The fortification and phase I of the structures found in trench were contemporaneous. The date of this occupational phase was determined from the discovery of the coins of Azes I. One of these coins was found in a stratum underlying a wall of phase II and therefore more or less contemporary with phase I. The initial date of Azes I is usually accepted as 57 B.C. A few silver punch-marked coins were found in this excavation. They were located in phase I, in an early deposit near north-east bastion and were also post-bastion. A coin of Kujula Kadphises (his precise date is unknown, but there is hardly any doubt that he was succeeded by the Kanishka group and therefore, he may be placed tentatively in the 1st century B.C. or almost in the early 1st century A.D.) was noticed in a pit subsequent to the structures of phase II, but earlier than those of phase III. From sub-period I of phase IV, came a coin of Huvishka, who may reasonably be placed in or about the 2nd century A.D. The same phase also produced a copper coin with mounted king on the obverse and Pallas standing to left which may be ascribed to Azes or Azilises¹. The coins of Azes were forthcoming from all the phases. Initially belonging to phase I, they appear to survive long. Speaking of the continuous habitation of the site Ghosh remarks, "though each phase had its individual plan.....there was no wholesale abandonment after any phase." This receives additional corroboration from the continuous use of the same type of coins.

In Arikamedu excavation only two coins were found and they did not help to build up chronology of the site since one was corroded and without any details and the other one, a well known type of Rājārāja Chola (A.D. 985-1017)², was "in the extensive areas of late disturbance"³.

At Brahmagiri 1947, no coin was found from stratigraphic digging. But the topmost of the three main cultures of this site was ascribed to the Āndhras on the basis of similarity of other materials, found from another site Chandravalli (Chitaldrug) in association with Āndhra coins. Apart from earlier excavations the closely observed one at Chandravalli in 1947⁴ yielded from strata ranging from 9 to 5 uninscribed lead or potin coins, which were in use in the Āndhradeśa from early times and about which as Rapson remarks "there seems to be no evidence to determine the date."⁵ Most of these coins came from deeper layers, seventh to ninth. Layers nine to seven also yielded lead or potin coins, some inscribed but of uncertain attribution

1 R. B. Whitehead, *Catalogue of coins in the Panjab Museum, Lahore*, Vol. I, pp. 92-93.

2 W. Elliot, *Coins of Southern India*, p. 133, pl. IV, 166.

3 R. E. M. Wheeler, A. Ghosh and Krishna Deva, "Arikamedu: An Indo-Roman trading station on the east coast of India" *Ancient India*, No. 2, p. 108; also p. 24

4 R. E. M. Wheeler, "Brahmagiri and Chandravalli 1947: Megalithic and other cultures in the Chitaldrug District, Mysore State," *Ancient India* no. 4, pp. 181-210.

5 E. J. Rapson, *Catalogue of Andhra and Western Kshatrapa coins*, p. lxxvii.

and others containing the names of Sadakaṇa Kaṇa Mahārāṭhi-puta (layer 8), Cuṭu Kulānanda (layer 6), Sadakaṇa Cuṭu Kanha-Mahārāṭhi (layer 7), Sadakaṇa Kalālāya (layer 7) and simply Mahārāṭhi (layer 9 to 7). These were probably the feudatories of the Āndhra kings of the ruling dynasty. In the Puranic list, the names of these princes or families do not occur in the list of ruling Āndhra kings. The uncertainty about the date of the strikers is partly eliminated by the palaeography of the inscription which, in the opinion of Deva "are assignable to a pre-Puṣumāvī period, though not in any case, it seems, earlier than c. 50 B.C."¹ The coins thus generally speaking are indicative of the Āndhra occupation of the territory from 1st century B.C. to 2nd century A.D.

A more precise date of the Āndhra occupation in the region is suggested by the find of coins of Yajña Śātakarṇi, one at layer 6 and another at layer 5. This ruler may be placed in the 2nd half of the second century A.D.² The layers deeper than 6, therefore, are earlier in date and layer 4 onwards, later.

The very layer 5 to which a coin of Yajña Śātakarṇi is assignable yielded a denarius of the Roman emperor Tiberius of late Livia-Pax type, minted c. A.D. 26-37³ Whether the Roman coin of an earlier date was surviving in layer 5 or whether the date of the layer is to be indicated by the date of the denarius rather than of the issue of the Āndhra king is a debateable point. A coin of Vāsishṭhiputra Puṣumāvī was found from the second layer of another cutting of Chandravalli, the stratigraphic relation of which with the main site could not be established. But it is an indication that at the time of Puṣumāvī c. A.D. 131-155 the site was under Āndhra occupation and this Roman denarius as well as other Roman denari found at Chandravalli from time to time represented "a quandom hoard, dissolved anciently and used locally as a high value currency alongside the local coinage."⁴

A silver punch-marked coin was found from stratum 7. The date of punch-marked coins in India is not precise. These have been found in association of datable objects varying from 4th century B.C. to 2nd century A.D. At Bhirmound, Taxila, a hoard was found in association with a worn siglos, two coins of Alexander the Great and one of Philip Aridaeus. It must therefore have been buried after the time of Philip (323-317 B.C.). While the coins of Alexander were in a mint condition, Indian issues and the siglos were comparatively

1. R. E. M. Wheeler op. cit., p. 289.

2. Op. cit. p. 287

3. Ibid.

4. Ibid.; also R. E. M. Wheeler, *Rome Beyond Imperial Frontiers* (London, 1954), p. 140. The yielding of Roman Coins at Nagarjunakonda adds further strength to this view. The complete absence of rouletted ware at Nagarjunakonda coupled with its presence at near by Amarāvati may be considered to be negative evidence to show that the Andhra-Ikshvāku period in the valley was later than 2nd century A.D. The Roman coins found there, too, could be of the same significance as at Chandravalli.

worn.¹ A date of early 4th century B.C. thus may be assigned for the antiquity of Punch-marked coins. At Chandravalli evidently it is of a later date.

No coin was recovered from Śiśupālgarh I (Early Period) which is tentatively assigned to c. 300 to 200 B.C. on the basis of evidence of pottery. The other three successive strata were II A (Early Middle Period): c. 200 B.C. to 100 A.D., II B (Late Middle Period): c. A.D. 100-200 and III (Late Period): c. A.D. 200-350. Whereas the date of the first of these periods was suggested by the combined evidence of pottery and coin, that of the following ones was determined exclusively on the evidence of coin.²

Rectangular uninscribed copper coins were recovered from IIA and were also in circulation in period IIB. These copper coins had similar designs occurring on the copper punch-marked coins from Eran, (Saugar district, Madhyapradesh) which "have affinities with the punch-marked copper coins and coins of Ujjayini."³ Though these cannot be precisely dated, as Allan points out, they are possibly isolated survivors of the copper coinage of ancient India which corresponded to the silver punch-marked coins.⁴ A silver punch-marked coin found in IIB also did not come to be of much help in determining the chronology of the phase because of its indeterminate date. Moulds of punch-marked coins were discovered in layers belonging to the late level of period III, attributable to c. A.D. 300, which showed that at Śiśupālgarh at least, punch-marked coins were in circulation till as late as c. A.D. 300. More helpful was the discovery of a copper coin of Huvishka at the upper level of period IIB. Period III yielded a unique gold coin showing the Kushāna design of standing king, copied from the coinage of Vāsudeva on the obverse with a Brāhmī legend in characters of 3rd century A.D. and a Roman head with a Roman legend on the reverse. The coin was evidently later than the time of Vāsudeva I and stylistically, earlier than the gold issues of the Gupta kings. It will thus have to be placed in the third century. The latest levels of the site conceded coins usually known as Purī Kushāna. These were in circulation over a wide area,

1. *Ann. Rep., A.S.I.*, 1924-25 pp. 47-48, pl. IX.

A.H. Dani has tried to prove that the hoard was post-Mauryan in date because associated objects found with the hoard were not dissimilar from another smaller hoard found in 1912 along with the coin of Diodotus (248 B.C.) and that because the later hoard did belong to Stratum II (of Marshall's nomenclature) of Taxila" belonging to post Mauryan period, the larger one also would be post Mauryan in date; A. H. Dani, "Punch-marked coins & the evidence from Taxila, *J. N. S. I.*, Vol. XVII. part II, pp. 26-32. But Marshall definitely places the later hoard to his excavated stratum III, "which dates in all probability from early years of Mauryan rule", (John Marshall, *Taxila*, pp. 105-106, 110), if we are to attach any importance to Marshall's strata at all. The associated finds because of their Græco-Roman character do not prove that the objects were post-Mauryan and were of the Indo-Greek period. At least two of the objects of the hoard, the coin of Alexander the Great and that of Diodotus certainly did not originate in the post-Mauryan period. The same could be said about other associated objects also.

2. B.B. Lal, "Śiśupālgarh 1948: an early historical fort in eastern India," *Ancient India*, No. 5, pp. 62-105.

3. *Ibid.*, p. 97

4. J. Allan, *op. cit.* p. xe.

probably over the whole of the ancient Kalinga in a period following the fall of the Kushāṇas whose coin-type they adopted. One specimen of this class inscribed in characters of the early fourth century A. D. was discovered in the Rakha hills, Singhbhum, Bihar,¹ which may indicate that these pieces probably belonged to the end of the third or early fourth century A. D. Lead coins mostly worn but one showing resemblance to an Āndhra type, with lion on the obverse and triangle headed standard on the reverse² and another showing Ujjain symbol were found in the upper levels of the period IIB and lower levels of Period III. The date of the coins cannot be determined though from the associated finds of this site some idea about the period of their prevalence can atleast be guessed. But that is a different issue.

Periods I and II of Hastināpura³ did not yield any coin. From period III were recovered two distinct varieties of coins, punch-marked and uninscribed cast copper. "The former were flat, rectangular pieces of either copper or silver and bore punch-marked symbols including 'crescent on hill', 'Sun' and the like. A majority of the latter was cast in a mould, the metal being invariably copper. The symbols thereon consisted of 'crescent on hill', 'tree in railing', 'circlets,' etc"⁴ In spite of the non-availability of the precise date that both these types of coins were prevalent in a period ranging from the 4th century B. C. to 1st century A. D. and at places even later has already been hinted. How far earlier to 4th century B. C. can any of these be attributed is still a matter of guess. In any case, they fall within the chronological boundary of the period III of Hastināpura, which Lal assigns between early 6th to early 3rd century B. C. The next stage of Hastināpura, period IV has been dated essentially on the evidence of coins found in its levels as one ranging from early 2nd century B. C. to the end of the 3rd century A. D. Apart from the fact that coins more or less precisely datable were recovered from this period, the excavation at period IV of Hastināpura is of more than usual interest as it has shown clearly the relative position of different groups of well-known coins in clear vertical section thus affording their chronological sequence. "They were distributed throughout the period, from its beginning till almost the end, so that their dating evidence is easily cross-checked."⁵ The punch-marked and uninscribed cast coins, two of each class, recovered from this period were possibly survivals of the earlier period. From the lower levels were recovered five coins of the rulers of Mathura. Struck on copper they had the usual Lakshmi figure on the obverse. The group including two of Śeshadatta may be assigned to the beginning of the 2nd century B. C. The date is suggested by the epigraphy of the legend. Besides,

1. *Journal of the Bihar and Orissa Research Society*, 1919, p. 80.

2. E. J. Rapson, op. cit. pl. III 36-38

3. B. B. Lal, Excavation at Hastināpura and other explorations in the Upper Ganga and Sutlej basins 1950-52: "New light on the Dark Age between the end of Harappa culture and the early historical period," *Ancient India*, Nos. 10 & 11, pp. 5-151.

4. Ibid, p 101

5. Ibid, p. 22

historical evidence also shows that the strikers of this class of issues, fairly large in number, were earlier in date than the Śaka Satraps of Mathura who were ruling in that region in the latter half of the 1st century B. C.¹ Beginning of 2nd century B. C. can reasonably be attributed to the commencement of the period IV of Hastināpura. Yaudheya coins were found in the mid-layers of this period, contemporary with structural sub-periods 3, 4 and 5. These were copper issues of the "bull and elephant" type. On the basis of epigraphy "these coins may be dated in the late second-first century B. C."² If the subperiod 3, where the coin was met with for the first time is considered to be even second half of the 1st century B. C., sub-periods 4 and 5 may be taken to represent a period extending from the beginning of the Christian era to early 2nd century A. D. The sub-period 6 conceded ten imitation copper coins of Vāsudeva which may tentatively be assigned to the late 3rd century A. D.³

The site of Hastināpura was deserted after 3rd century A. D. and was again rehabilitated in the mediaeval period. The only firm date of this last period is furnished by the discovery of a coin of Sultan Ghiyasuddin Balban (A. D. 1266 – 87) "from a layer falling between structural subperiods 2 and 3",⁴ the total number of subperiods being four.

In Western India, coins recovered from excavation at Baroda⁵ were extremely helpful in determining the date of the site. From the dig of several trenches located in different parts of the city, which were later on correlated, six different periods of occupation were clearly noticed. Period II revealed Kshatrapa coins with the legend "*Rājā Mahākshatrapasa...*" restructured over earlier unidentifiable issues, and therefore was assignable to 2nd century A. D. Period III yielded three Gādhia coins. These vary in date from 7th to 12th century A. D. While those with clear profile may be assigned to an early period, those with a rough profile but with clear perceptible features are likely to represent the middle period, about 10th-11th century and the degenerate ones, upto 13th century A.D. Baroda specimens seem to belong to early and middle periods and as such the occupation of period III ranged probably from 7th to 10th century A. D. Period IV had a Gādhia coin in a spoil pit. This, coupled with the discovery of glazed Islamic pottery would point to a date round about the 13th-14th century A. D. From period V came two copper coins, one belonging to Ahmed Shah (1470 – 1443 A. D.) and the other to Muhmad Begra (1458 – 1511 A. D.), who were rulers of the region. The rule of Gaekwad in the 19th century A. D. receives corroboration from a coin of Khanderao Gaekwad, found in the last stage, period VI.

1. J. Allan op. cit., pp. CVIII-CXVI

2. Ibid, pp. CXVIII-CXIX

3. They were divisible into two subtypes. In one case the obverse had 'king at altar' and 'Śiva and bull' reverse. The other had a throned goddess on the reverse.

4. *Ancient India*, Nos. 10 & 11, p. 102

5. B. Subba Rao, *Baroda through the Ages*. pp. 12-16, 78-83.

Further south at Kolhapur, chronology of the site Brahmapuri was established on the basis of the discovery of coins.¹ Period I was ascribed to 2nd century B. C. to 1st century A. D. and period II, which was more or less a continuation of the previous period, at least culturally, to 1st-2nd century A. D. Two copper square cast coins, one with the legend Śātakarṇi in Brāhmī script of about 200 B.C. and the other with the legend blurred were found respectively from layers 4 and 10. A coin of Śrī Yajña Śātakarṇi in potin was found from layer 3. A copper coin of Gautamīputra Śātakarṇi was located in layer 6. Layers 10 to 3 conceded coins in lead of Mahārāṭhis, along with uninscribed ones from layers 9, 6 and 3. From layers ninth to fifth came coins of Viḷvāyakura. A lead coin of Rāṇo Chutukulānanda was found in layer 9. A study of the epigraphy of the legend and quantitative position of the coins (conceding the fact of survivals) lead to the conclusion that in the period representing pre-brick structural activity the region was under the rule of the early Śātavāhanas, when they ruled the area with their feudatories Chutus, Kuras, and Mahārāṭhis. This was the first stage of occupation of the site or period I. Period II represented the rule of the Imperial Śātavāhanas over the region; none of the coins of Gautamīputra Śātakarṇi or Yajña Śātakarṇi was found in the prebuilding phase. Period III of Brahmapuri was indicated by two tiny gold coins of Śilāhāras of Konkan, thus approaching 11th-12th century A. D. The date of the next stage was determined by the discovery of several Bahamani coins. Three of these belonged to Mahmud Shah III (1463 to 1482), one to Mahmud Shahbin Muhammad (1482 to 1518) and two to Ahmed Shah II (1435 to 1457). A coin of Aurangzeb discovered at that site confirmed the historical fact of the emperor's camping on the mound which might be the final date of abandonment of the site.

Period IIB at Nasik was assigned a date between c. 200 to 50 A.D., mainly on the basis of the find of two uninscribed cast coins which were found in the lowermost stratum of this subdivision. The fourth period of Nasik was given a date ranging from c. 1400 A.D. to 1875 A.D. The limits were suggested by the evidence of coin alone. A coin of Akbar was found below a wall of this period, which marked the earliest occupation of this period, while a coin of Malhar Rao Gaekwad indicated the end.²

Of the periods revealed in the excavations at Maheswar and Navdatoli, the first two assignable to stone age and the next one to protohistoric period did not yield any coin. The first phase of the early historic period which was named period IV at Maheswar revealed coins. These were punch-marked silver as well as copper, uninscribed cast copper, local or tribal ones of Taxila and Ujjayinī, a local type

1. H. D. Sankalia and M. G. Dikshit, *Excavations at Brahmapuri (Kolhapur) 1945-46*, pp 33-36.

2. H. D. Sankalia and S. B. Deo *Report on the Excavations at Nasik and Jorwe*, p. 29. A Śātavahana coin, probably of Śātakarṇi came from a much later layer and thus was of little stratigraphic significance.

of Mahishmati and a doubtful specimen of the Śātavāhanas.¹ No coin came from period V and though some of these coins were found from the surface it was almost certain that they belonged to period IV. The same cultural phase also yielded N.B.P. ware and bricks bearing letters ascribable to the 3rd century B.C.² Mainly the coins, associated with N.B.P. and epigraphic evidence put the phase into a period ranging from 400 B.C. to 100 B.C.

A number of diggings were carried out during the last several years in various parts of India. Except for short notes or brief reports published so far,³ detailed accounts of these excavations are not available. But even the summary results that have come to light abundantly show the importance of coins in stratified digging to determine the date of cultural sequence. The first and second periods of Rupar represented Harappa and Painted Grey Ware cultures respectively, when, as far as we know, use of metallic currency was unknown. The next period was assigned a date commencing from the middle of the first millenium B.C. to the end of the 3rd century B.C. The date, suggested by the find of an inscribed seal and pottery received further corroboration from the recovery of punch-marked and cast copper coins. The fourth period of Rupar was remarkably rich in coins. The earlier levels yielded issues of Indo-Greek king Antialkidas (second-half of the 2nd century B.C.) and of the nameless Indo-Parthian king Soter Megas, who probably ruled round about 100 A.D. Equally important for determining the date was the find of a clay mould of a coin of Apollodotus II (1st century B.C.). These were associated with Taxila and Mathura coins, c 200 to 100 B.C. Coins of Audumbaras and Kuṇindas were met with in the mid-layers and were followed by a number of Kushāṇa coins and a hoard of over 600 copper coins, mainly of Vāsudeva. The Audumbara coins contain legends in Prakrit written over them and the epigraphy points to 1st century B.C. Kuṇinda coins bearing Brāhmī and Kharoṣṭhī legends and largely influenced by Indo-Greek hemidrachms are also assignable to the same date. Kushāṇa coins apparently indicated the next chronological phase. A gold coin of Kumāradevī—Chandragupta type of the Gupta period took away the upper layers of the period to the middle of the 4th century A.D. The fifth period at Rupar revealed a coin of Huṇa ruler Mihiragula (c. 510-540 A.D.) but since it was found from "accumulations" (dump?) its dating evidence was not significant. The last period from 13th century onwards was dated along with other materials by Mughal coins, found almost on the surface.⁴

1. H. D. Sankalia, B. Subba Rao and S. B. Deo, *Excavations at Maheswar and Navdatoli*, pp. 66, 67.

2. *Ibid.*, pp. 21, 22

3. Authoritative brief reports of these excavations are mostly available in the annual issues of the Union Department of Archaeology, published under the heading, *Indian Archaeology, A Review*.

4. *Indian Archaeology 1953-54, A Review*, pp. 6, 7; Y. D. Sharma, "Past patterns in living as unfolded by excavations at Rupar," *Lalit Kala*, 1955-56 nos. 1-2, pp. 121-29.

At Kauśāmbī, the later part of period II with three brick structural subperiods was dated, apart from the basis of pottery exclusively on the evidence of coins, from 4th century B. C. to 2nd century B. C. Subperiod 1a started from layer 12. From layer 12 of the site to be followed by successive four layers came uninscribed cast coins and from layer 11 to 8 the lanky bull coins, typical of Kauśāmbī'. The close resemblance which the latter have both in type and technique,² with the cast copper coins on the one hand and the early inscribed coins of Kauśāmbī on the other hand, which from the point of view of epigraphy "cannot be later than the first half of the 2nd century B.C. and might even be as early as the 3rd century,"³ leaves little doubt about their age. Subperiod 3, 4 and 5 belonging to period III are well represented by the second group of Mitra coins of Kauśāmbī. From layers 7 and 6 came coins of Prajāpatimitra, Suramitra and Brihaṣpatimitra and from layers 4 and 5 those of Rajanimitra. On the basis of epigraphic evidence Allan concludes the date of the second series of Mitra kings of Kauśāmbī to "the end of the second and first century B.C."⁴ Sharma assigns the subperiods represented by them from the end of the 2nd century B. C. to about the end of the 1st century A.D. Subperiods 6 & 7 took away the history of the site up to the middle of the 3rd century A.D. Layer 3 falling within it conceded coins of the Kushāṇa kings Kanishka, Huvishka and Vāsudeva and of the Magha kings Śatamagha, Vijayamagha, Śivamagha and Vaiśravana and of king Nevasa. The coins of Maghas survived upto subperiod 8, probably representing 3rd century A.D. where a coin of Puśvaśrī was also noticed. Almost from the surface were discovered coins of Gaṇendra or Gaṇapatiṇāga who may be identified with Samudragupta's adversary of the same name mentioned in the Allahabad Pillar inscription. The character of the coin legend also points towards the middle of the 4th century A.D. when the site was evidently abandoned.

Though human settlement at Nāgārjunakoṇḍā ranged from the stone age to mediæval times, it was not without breaks, and in the historical period, except for once in the 3rd-4th century A.D. was not of a considerable nature. As a result there has been no continued accumulation of occupation debris of different periods at any area in the valley. Evidence of casual monocultural occupations having at the most two to three structural levels is all that one usually gets here. Stray finds of coins from largely separated trenches spread throughout the valley but occasionally in association with structures no doubt embody the chronology of the site, though the evidence may not always be conclusive. Among earliest datable coins are the Roman aurei, one belonging to Tiberius (A.D. 16-37) and the other to Faustina the Elder, mother-in-law of Marcus Aurelius and queen of Antonius Pius,

1. G. R. Sharma, Excavations at Kauśāmbī, 1949-1955, *Ann. Bib. of Ind. Archaeology*, Vol. XVI. pp. XXXVI to XLV.

2. J. Allan, op. cit. pp. XCIV-XCVI

3. Ibid. p. XCVI

4. Ibid.

issued after A.D. 141. Like Chandravalli, here too these might be members of a quondam hoard in which case they would not be indicative of the date of the contemporary occupation. Śātavāhana copper issues include those of Puṣumāvī, Yājña Śātakarṇi and Śātakarṇi. Whether these were really in circulation or were mere intruders from neighbouring regions is difficult to say in view of the absence of any other firm evidence of Śātavāhana rule in the territory. Innumerable lead coins of Chāntamūla Virapurūṣadatta, Ehuvala Chāntamūla corroborate the Ikshvāku rule. A copper coin, presumably of the Qutbshahi period, another of a Saluva ruler (Narasimha) of Vijayanagar bearing the Gaṇḍabheruṇḍa and two silver pieces of Harihara II indicate a mediæval date for the site, otherwise unknown.¹

At Purānā Qila, New Delhi, silver punch-marked and cast copper coins were recovered from early stages of period II; the later stages yielded coins of Mathura, 2nd century B.C., of the Yaudheyas, 1st century B.C. to 1st century A.D. and of the Kushāṇas, 1st-2nd century A.D. and thus established even from an exploratory dig a complete chronological sequence of the site.² Equally helpful was a minor dig at Mathura where in the 2nd period of occupation were found copper coins (cast?) which were followed by Kushāṇa coins in the next stage and by Gupta coins in the 5th or final stage.³ At Pāṭaliputra, period II, on the basis of lanky bull type of Kauśāmbī coins was given a date in the 2nd-1st century B.C. This was followed by a period assignable to 2nd-3rd century A.D. as indicated by a find of gold amulet fashioned after the coin type of Huvishka, showing the bust of the king, with the legend 'Shāonāno Shāo Ooeshki Koshāno' on one side and the Roman goddess Ardochso on the other with a Greek legend giving her name.⁴ In eastern India, the period II of Tamluk was given a date in the 3rd-2nd centuries on the basis of the recovery of cast copper coins⁵ which were further found at another site, Chandraketurgarh, Dist 24 Parganas, in a layer belonging to occupational period III.⁶ At Amreli, period II was divided into several occupational phases which were dated mainly on the basis of the recovery of coins. Thus phase I of period II was given a date between the beginning of the 1st century B.C. to the middle of the 1st century A.D. on the evidence of an Ujjain coin whereas subsequent phases yielded coins of Śaka kings Dāmajadaśri III, Vīradaman, Svāmī Rudrasena II and Rudrasena III who were ruling over the area in the 3rd century A.D.⁷

The data marshalled above amply show the stratigraphic significance of coins in scientific diggings. They have, more than any other class of antiquity, helped to build up a chronological framework for cultures revealed in Indian excavations. In the method of

1. *Indian Archaeology, 1955-56, A Review*, pp. 23-26: *Ibid*, 1956-57, p. 88

2. *Indian Archaeology*, 1954-55, p. 14.

3. *Ibid*. pp. 15-16.

4. *Ibid*. 55-56, pp. 22-23

5. *Ibid*. 54-55, p. 20.

6. *Ibid*. 56-57, p. 30

7. Information received from Sri S. R. Rao.

dating, no doubt there are several lacunae. Many of the coin types, particularly those earlier than 1st century B.C. cannot be precisely dated. Even for coins which are inscribed, opinions differ. Palæography, as revealed from a coin legend consisting of very few letters, can at the most indicate the assignment of the issue to a broad chronological set up. Then again issues of well known monarchs like Kanishka or Huvishka or some of the earlier Yavana-Saka-Pahlava rulers cannot be given a scrupulously exact date, since the dates of their strikers cannot be very accurately determined. Besides a coin of an earlier date due to various reasons, can survive for an indefinite period and can be found in a stratum of a later date. Admittedly these are limitations. But since archæology is not a pure science, an excavator will always have to work under such limitations of conditions though with the increased knowledge about pottery and other commonly found objects of antiquity it will be possible more and more to crosscheck the datings obtained from the evidence of coin.

Coins not only determine by their finds the date of their parent layers, but along with it, the date of all objects lying in its association. The date of a few principal types of industry thus determined has immensely helped to build up a general chronology in recent excavations.

Of the pottery types falling within the limits of historical period, the Northern Black Polished ware is a remarkable one because of its clearly distinguishable types, polish and fabric and above all by its wide geographical distribution almost throughout India. At Taxila it was found at Sirkap as well as at Bhirmound.¹ At Sirkap it was not found in association with coins and from the evidence of its stratum at a depth of 18 feet below the surface, it was considered to be of an early date, "probably in the first half of the second century B.C." At Bhirmound also, the pottery type was not interlocked with coins, but of the eighteen sherds excavated, only one was found within 6 feet, the remaining pieces were located between 6 feet and 13 feet from the surface. Datable coins of Alexander (325 B.C.) and of Philip Aridæus (317 B.C.) were found along with punchmarked coins in a hoard at a depth of about 6 feet. Another hoard of bent bar silver coins and other objects presumed to be of the same date was also recovered at about an equal depth.² N.B.P. at Taxila was therefore essentially pre-Alexandrian. Seven feet of occupational deposit is considerable enough to point out to a wide margin in date and as Lal remarks "the ware may well have appeared at the site sometime during the sixth century B.C."³ N.B.P. was found at a large number of other Indian sites in association with punch-marked and copper coins. (See chart 1). As has already been pointed out the origin and main period of circulation of both these type of coins definitely go back to a period earlier than the 2nd century B.C. and at some sites they are likely to be

1. *Ancient India*, No. 1, p 56, Nos. 10 & 11, pp. 22-23.

2. *Ann. Rep. A. S. I.*, 1924-25, pp. 47-48; G. M. Young, "A new hoard from Taxila (Bhir Mound)," *Ancient India*, No. 1, pp. 27-36

3. *Ancient India*. Nos. 10 & 11, p. 23.

earlier than the 4th century B.C. which should also be the date of the N.B.P. An examination of the earlier levels of Hastināpura and Kauśāmbī further elucidates the comparative relation. At Hastināpura all the N.B.P. sherds come from Period III, majority confined to lower levels. Punch-marked coins were generally in association with these sherds. But a few pieces of N.B.P. were found in layers below the lowest occurrence of the punch-marked coins. At Hastināpura the origin of N.B.P., like that at Taxila would therefore be slightly earlier than that of the punch-marked coins, though for the greater part of its life the ware was coterminous with the punch-marked coins. N.B.P. was not found in period IV of Hastināpura, the earliest levels of which yielded Mathura coins datable to 2nd century B.C.¹ At Kauśāmbī of the eight subperiods yielding N.B.P. the first five were devoid of any coin, the next four conceded uninscribed cast copper coins and the lanky bull types.² In the Narmada valley, at Maheswar, N.B.P. was found in association with punch-marked silver and copper coins, coins of cast copper and tribal coins of Taxila and Ujjain, from which its position there in a chronological set up ranging from c. 400 to 100 B.C. was considered to be reasonable enough.³ In the south, at Brahmapurī period I N.B.P. in its later stage was found in association with the issues of the early Śātavāhanas. One of these had the legend *Satakanīsa* written on it in Brāhmī characters of c. 200 B.C.⁴ The N.B.P. is found in abundance at North Indian sites, while they are comparatively infrequent at further south. The origin of this industry thus appears not unlikely to be North where it is likely to have had a date earlier than at South; some margin in terms of date will have to be given for the migration of the ware in that direction. N.B.P. in north India therefore antedates punch-marked and cast copper coins by about a century or so and is mostly coeval to them while in the south it is interlocked with coins of the 3rd century B.C. An approximate date ranging from 6th to 3rd century B.C. can thus be assigned to this industry on the evidence of coins.

The Red Polished Ware is found in abundance at a large number of Western Indian sites, mainly from areas situated near the coast. While its likeness to Samian ware tends to point out the origin of this industry to a date following the Indo-Roman trading period of the 1st century A.D. when this class of pottery was likely to evolve on Indian soil, the supposition receives further confirmation from the stratigraphic evidence of coin. Kshatrapa coin recovered from period II of Baroda⁵ and ascribable to 2nd century A. D. and phases II to V of period II of Amreli assignable to 3rd-4th century A. D. were found in association with the Red Polished Ware.⁶ At Brahmapurī period II red surfaced (red polished?) Roman ware was coeval with the Imperial Śātavāhana coins. At least two of these coins could be

1. Ibid. pp. 10-25.

2. G. R. Sharma, op. cit., p. XXXVII-XLI.

3. *Excavations at Maheswar and Navdatoli*, pp. 66-68.

4. *Excavations at Brahmapurī (Kolhapur)*, 1945-46, p. 41.

5. *Baroda through Ages*, p. 14.

6. *Ancient India*, No. 9, p. 162.

clearly identified. They were issues of Gautamīputra and Śrī Yājña. The period II of this site was dated on the evidence of coins to a period ranging from the end of the first to the end of the third century A.D.¹ The evidence from Nevasa was similar where the industry was seen in association with Āndhra coins and in a period assignable from the 1st to 3rd century A. D.² Excavations at Tripuri also tell the same tale where period III dated in the 2nd century A.D. yielded the pottery along with late Śātavāhana coins.³ At Bahal, the industry was contemporary to early Śātavāhana rule in the period III of the site, i.e. 1st 2nd century A.D.⁴ At Maheswar, R.P.W. was the characteristic industry of period VI and could be assigned to a period in between 100 A.D. and 500 A.D. No coin was associated here with this industry, but as punch-marked, cast copper and Taxila-Ujjain tribal coins were found in period IV, assignable mainly on the basis of these coins to a period covering from 400 B.C. to 100 B.C. and as another short cultural phase intervened, the period of Red Polished Ware could be dated as one belonging to the first few centuries of the Christian era.⁵ The Red Polished Ware therefore may be placed in the early centuries of the Christian era ; 2nd and 3rd centuries were the main period of its prevalence.

A yellow or white painted russet coated coloured pottery type decorated with varieties of simple rectilinear or slightly curvilinear patterns was found at Brahmagiri period III. The industry was coeval with rouletted ware and was on the basis of latter's resemblance and association with datable mediteranean pottery, given a date extending from the 1st to 3rd century A.D.⁶ The date received final confirmation from excavations at Chandravalli where it was interlocked with Śātavāhana coins and denarii of Augustus and Tiberius ; the denarii, in the opinion of the excavator at Chandravalli were in that site survivals and of a later date than the date of their actual circulation being members of a quondom hoard.⁷ At Brahmapuri the same type of pottery was found in period II in the company of the coins of the Imperial Śātavāhanas.⁸ This industry has so far been noticed at a large number of sites situated in the territory ruled by the Śātavāhana kings and has been given the name of Āndhra Ware, its period of circulation being coterminous with the period of the Śātavāhana rule, as indicated by the evidence of coin.

Apart from the three distinctive classes of pottery referred to above, local pottery of early historical period recovered from a number of sites of northern India are also datable being found in association with local, tribal or Kushāna coins. While specimens from some of

1. *Excavations at Brahmapuri (Kolhapur)*, 1915-46, pp. 40-42.

2. *Indian Archaeology, 1954-55, A Review*, p. 7.

3. M. G. Dikshit, *Excavations at Tripuri*, p. 39 sqq.

4. *Indian Archaeology, 1956-57, A Review*, p. 18.

5. *Excavations at Maheswar and Navdatoli*, p. 22.

6. *Ancient India*, No. 4, p. 203.

7. *Ibid.*, p. 287.

8. *Excavations at Brahmapuri (Kolhapur)*, p. 59 sqq.

the excavations have already been published¹ others are awaiting publication. It will be rather premature to comment on their dates at this stage; a comparative study of these pottery types has yet to be made.

Of industries other than pottery which go well with the stratigraphic evidence of coins, mention may be made of terracottas, particularly the so-called Śuṅga moulded terracottas which are well distributed over the whole of northern India. At Ahichchhatra these are found in stratum VII with cast copper coins, at stratum VI with Pañchāla coins of the 1st century B.C. and at Hastināpura from the lower levels of period IV which yielded coins of Mathura kings.³ At Kauśāmbī they were noticed in levels of second century B.C. along with copper cast coins which originated in the site sometime about 300 B.C. and with lanky bull coins.³ Śuṅga terracottas at Rupar came from the lower levels of period IV with datable coins of 2nd century B.C.⁴ Excellently moulded terracotta figurines of Śuṅga period were obtained from the earlier levels of period III of Purana Qila ascribable to 2nd century B.C. The industry there was coeval with Mathura coins of 2nd. century B.C. and was an early contemporary of Yaudheya coins of the 1st. century B.C. The Kushāṇa coins, found in the upper layers of the period were later than the Śuṅga terracottas.⁵ In eastern India the evidence was similar. Here Śuṅga terracottas were recovered from period II of Tamluk interlocked with cast copper coins.⁶

At some of the principal sites of northern India, terracottas were noticed to shed away the Śuṅga characteristics and assume definitely developed traits in later levels where they were mostly found in association with Scythian, Kushāṇa or other contemporary coins. At Kauśāmbī coins of the second group of Mitra dynasty assignable palæographically, apart from other considerations to about 1st. century B.C. to 1st century A.D. were found from structural periods 4 and 5 of period III, which could be given a date ranging from c. 100 B.C. to 100 A.D. The contemporary terracotta figurines were not Śuṅga ones, but a special class showing Śaka-Parthian contacts with India, almost identical with similar types discovered at Selucia and other well-known Śaka-Parthian stations.⁷ At Taxila, comparable terracotta figurines were obtained from phases I, II and III which yielded coins of Azes and Kujula Kadphises.⁸

Of the large number of terracottas recovered from stratum IV of Ahichchhatra only one could be definitely recognised as a *mithuna* Śuṅga plaque, others mostly dwarf and grotesque figures like the stone

1. *Ancient India*, No. 1, pp. 37-59; No. 4, pp. 41-84; Nos. 10 & 11, pp. 5-151; *Lalit Kala*, 1955-56, Nos. 1 & 2, pp. 126-127.

2. *Ancient India*, No. 4, pp. 104-179; Nos. 10 & 11, pp. 12a, 18. 83-85.

3. *Ann. Bib. of Indian Archaeology*, XVI, pp. XL, XLI.

4. *Ancient India*, No. 9, p. 126.

5. *Indian Archaeology, 1954-55, A Review*, pp. 13-14.

6. *Ibid.*, pp. 19-20.

7. *Ann. Bib. of Indian Archaeology*, pp. XL-XLI.

8. *Ancient India*, No. 4, pp. 75-76.

sculptures of Maitreya and Buddha found in the same stratum belonged to the Kushāṇa art school. At Rupar, the Śuṅga terracottas were replaced by clay figures of Kushāṇa modelling in midlayers of Period IV. The evidence of Kauśāmbī was found to be exactly similar. Here, like the previous two sites Kushāṇa coins accompanied terracotta figures of Gajalakshmi, Hārītī, Kubera etc. prepared in typical Kushāṇa style. At Hastināpura, the upper level of period IV yielded, more or less in conjunction with imitation Kushāṇa coins terracottas prepared in the idiom of Kushāṇa art, one of which, a figure of Bodhisattva Maitreya, even vied with the Kushāṇa stone sculptures from Mathura.¹

Terracotta figurines and plaques showing clear Gupta traits were found along with Chandragupta Kumaradevī type of coin at the upper levels of period IV of Rupar and with Gupta coins of early and late period, from period V of Mathurā.²

At Ahichchhatra no Gupta coin was found with the Gupta terracottas. But the terracottas were recovered from Stratum III of the site which was later in date than the stratum yielding Kushāṇa or imitation Kushāṇa coins and which had in its core the coins of 'Acyu' probably struck by a contemporary of Gupta king Samudragupta.³

In addition to giving a date to the containing occupational strata or to other associated unknown or otherwise undatable objects, which no doubt is the primary utility value of a coin in a closely observed digging, the stratigraphic evidence of a coin can be interpreted to bear out further significant results. A coin at a particular stratum is also coeval with other types of material cultural equipments which go with it and is indicative of certain norms of life. At Hastināpura period III punch-marked and cast copper coins were found together at a certain stage of a community's life where the people were not only familiar with the use of iron but were using it extensively. They had some advanced idea about sanitation as exemplified by the presence of brick lined drains, soakage jars and a large number of ringwells, presumably used as soakage pits. Not only mud bricks, but also kiln burnt bricks were being used for the first time at the site for the purpose of building houses etc. The copper was an important industry and its products consisted of rings, bangles and antimony rods. Beads of semiprecious stones were popular. Terracotta figures were produced by modelling; a considerable progress was attained in the art. Use of mould for casting terracottas particularly human ones, was not altogether unknown. The presence of Northern Black Polished Ware indicated acquaintance of the community with other parts of India. The characteristic features of material culture of Rupar III, Purāṇā Qila II, Ujjain II, Mathura II, and Kauśāmbī II, which also conceded punch-marked and of cast copper coins were exactly similar. At Rupar the

1. *Ancient India*, No. 4, pp. 104-179; *Lalit Kala*, op. cit.; *Ann. Bib. of Indian Arch.*, pp. XLI XLIV; *Ancient India* Nos. 10 & 11, pp. 12a 18, 83-85.

2. *Lalit Kala* op. cit.; *Indian Archaeology*, 1954-55, A-Review, pp. 15, 16.

3. *Ancient India*, No. 1, p. 39; No. 4, pp. 104-79.

conditions of life advanced so much as to entail use of inscribed seal for commercial or administrative purposes, a feature also shared by period II of Ujjain and period II of Kausāmbī. Some of the traits of life such as common pottery type, similar terracottas, presence of bead industry, use of mud bricks in building houses, were shared also by Ahichchhatra stratum VIII, Tripuri periods II and III & Sonapur period V. In fine, punch-marked and cast copper coins are coterminous with and therefore stand for an extensively iron using, city building, brick made house constructing, varied type of high class pottery using, trade and commerce knowing culture, the attainment in the last item being indicated by the use of coin itself which was a contribution of this culture towards advanced form of economic life.

The coins of the Śātavāhanas of Deccan did not spread over so wide a span in region and time as the punch-marked and cast copper coins or some of the local-tribal coins of North India did. But the stratigraphic find of these specimens, even within restricted limits, stands for certain definite standards in living. Typical pottery, indigenous as well as foreign and pottery influenced by foreign techniques were noticed in association with these coins together with Roman denarii, knolin covered terracottas, fine brick built structures, underground drains, typical beads of semiprecious stones, translucent glass bangles indicative of a material prosperity rising mostly from maritime contact with the west. More or less same tale has been repeated at period II of Chandravalli, period II of Brahmapuri and periods IV and V of Nevasa. In the upper excavated levels of various sites of northern India tribal, local, Kushāna or Gupta coins, each stands for its own peculiar associated culture symbolised by common industrial activity; a clear picture of the life in all its manifold material aspects for the different phases, it is to be admitted cannot be construed due to inherent limitations of vertical excavation. None the less, the presence of Kushāna or imitation Kushāna coins with prosperous building activity, art specimens showing conspicuous evidence of the influence of Gandhāra or Mathura art, images of the Buddha, Bodhisattva and other gods and goddesses of the same pantheon from sites spread out from Taxila to Kausāmbī tends to point towards a hybrid culture. Nor the presence of Gupta or contemporary coins in the association of highly artistic terracottas, precious metal objects, developed forms of Brahminical deities, commercial seals, a developed form of architecture with special emphasis on the construction of temples is without any significance. A coin in an excavation, thus, is a culture criterion.

Apart from being some sort of yardstick for measuring the material attainments of corresponding strata, the evidence of coin, under certain circumstances, may be utilised to shed light on comparative abstract forms of culture, on the nature and contents of socio-economic life. But such speculations will take an archæologist, I am afraid, rather far from his restricted field of study and the matter should be better left to the choice of scholars devoted to the study of social history.

INDIA

SHOWING SITES MENTIONED
IN THE TEXT

SCALE OF MILES

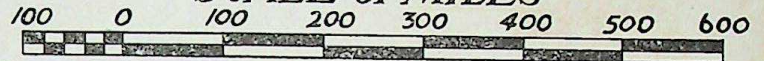


TABLE 1
SHOWING STRATIGRAPHIC SEQUENCE
OF COINS
IN EXCAVATIONS
WITH
ASSOCIATED OBJECTS

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
Silver and/or copper Punchmarked coin	1. Taxila (West Pakistan)	(a) Earlier than Structural Phase I	Antedating the 2nd half of the 1st century B.C.	1. (a) Pottery include bowls, jars, dishes, goblets etc., bowlc having a similarity with other finds of the same type from other North Indian sites, painted sherds, stamped and incised ware, beads of carnelian, agate, shell, glass and terracotta, local Taxila coin, cast moulded terracotta figures, votive tanks, iron and copper objects, bone and ivory objects. (b) Coins of Azes, fortification wall of the city palace walls, flooring with kanjur or clay.	Pottery types found in pre-structural phase more or less continued in the subsequent structural phases; the antiquities of different phases also did not differ in any appreciable manner.
		(b) Phase I	2nd half of the 1st century B. C.		
		(c) Post ba-Indeterminate station			
2. Rupar (East Punjab)		Period III	C. 600 to 200 B. C.	2. Iron objects in addition to bronze objects of the previous period, Northern Black Polished ware, unslipped red ware, cast copper coins, combs, hair pins, beads of agate, collyrium sticks etc. made of ivory, various types of toys made of terracotta, ivory seal inscribed in Brāhmi characters of the 3rd cent. B.C., carved stone disc bearing workmanship of the art prevailing in	

the Mauryan period, soakage wells of terracotta, houses built mostly with cut kankar stone, kiln burnt bricks also used.

3. Hastinā-pura (Uttar Pradesh)	Period III	C. 600 B. C. to 200 B. C.	3. Iron objects like arrowhead, sickle, chisel, Northern Black Polished ware, unslipped red ware, coarse grey ware, beads of carnelian and quartz, terracotta human and animal figurines—few moulded, copper ornaments, copper antimony rods, nail-parer etc., cast copper coins, terracotta ringwell, kiln burnt bricks, brick lined drains.
Silver and/or copper Punchmarked coin	4. Puran Qila (Delhi)	Period II	C. 600 to 100 B. C.
	5. Sonepur (Bihar)	Period V	C. 1st century B. C.
	6. Śisupāl-gaṛh (Orissa)	Period II B	C. 100 A.D. to 100 A.D.
			3. Iron objects like arrowhead, sickle, chisel, Northern Black Polished ware, unslipped red ware, coarse grey ware, beads of carnelian and quartz, terracotta human and animal figurines—few moulded, copper ornaments, copper antimony rods, nail-parer etc., cast copper coins, terracotta ringwell, kiln burnt bricks, brick lined drains. 4. Iron objects, Northern Black Polished ware, terracotta ringwell, cast copper coin, houses built of kiln burnt bricks. 5. Stone celt, cast copper coin, red ware of medium fabric, sealings of terracotta with symbols occurring on punchmarked coins, terracotta beads and ear ornaments, bangles of terracotta, copper antimony rods, kiln burnt bricks. 6. Copper cast coin, Huviska's coin, terracotta bullae, glass bangles, Northern Black Polished ware (survival), rouletted ware, beads, ornaments and iron objects as of period II A, general 6. Moulds of punchmarked coins were found at a later level of the site, period III, attributable to C. A. D. 300. Though no punchmarked

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
				deterioration in pottery types.	coin was found from this level, the discovery of the mould confirms that punch-marked coins continued in circulation till as late as C. A. D. 300.
	7. Jaugadā (Orissa)	Period II	?	7. Beads of semi-precious stones, shell and terracotta, copper and iron objects of peace and war, red ware with incised decorative patterns, brick and stone structure.	7. The punchmarked coin was found in an early level of the period.
	8. Ujjain (Madhya Pradesh)	Period II	C. 500 to 100 B. C.	8. Northern Black Polished ware, associated red ware, inscribed seal in character of the 3rd-2nd century B. C., brick fortification, buildings of mud, mud brick and kiln burnt bricks, terracotta ring wells, roads built of rubble with clay sealings, ivory hair pins, combs etc., terracotta ornaments, bangles of stone, shell, glass and copper, iron objects, cast copper coin, beads of semi-precious stones.	
Silver and/or copper Punchmarked Coin.	9. Amreli. (Bombay)	Period II (Phase I)	Ist century B.C. to Ist century A.D.	9. Coin with Ujjain symbol.	9. The coin was found in early layers of Phase I of the period, C. 50 B. C.

10. Tripuri (Madhya Pradesh) Period II C. 400 to 300 B. C. 10. At Tripuri punchmarked coins were found from a period as late as 4th century A. D.
11. Chandra-valli (Mysore) Period II 1st century to 3rd century A. D. 11. Sātavāhana coin, Roman denarii, unscripted copper coin, rouletted ware, yellow painted Andhra ware, polished red ware, brick built wall, underground drain.
12. Bahal (Bombay) Period III(?) C. 300 B.C. to A.D. 100 12. Northern Black Polished ware, a gritty red slipped ware marked occasionally with graffiti, semi precious stone beads, floor made of rammed pebble with post holes, iron in use which appeared at the site already in period II (c. 600 to 300 B.C.) [SUB PERIOD-A].
13. Maheswar. (Madhya Pradesh) Period IV C. 400 B. C. to 100 B. C. 13. Northern Black polished ware, bricks bearing letters ascribable to 3rd century B. C., local coins of Taxila, Ujjain and Mahishmati, unscripted cast copper coins.
12. A hoard of silver punchmarked coin was discovered at Bahal as a chance find, unassociated with the excavation which was carried on afterwards. To which period they are to be assigned? In stratigraphic digging no silver punch-marked coin was recorded to have been found. Since the 1st period of Bahal was a chalcolithic one and the 2nd and 3rd periods were assigned dates ranging respectively from C. 600 to 300 B. C. and 300 B. C. to A. D. 100, next phase being assignable to C. A.D. 1300 to 1700, the punchmarked coins found there could be contemporary to period II or period III only. As a measure of caution, phase III is suggested here which also yielded N.B.P.

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
Cast Copper Coin	1. Rupar (East Punjab)	Period III	C. 600 to 200 B. C.	1. See under Punchmarked coin.	
	2. Mathura (Uttar Pradesh)	Period II	C. 600 to 200 B. C.	2. Northern Black Polished ware, beads of semiprecious stones and terracotta figurines of mother goddess, terracotta, ringwell, bamboo and reed huts in early levels, partially moulded terracotta figurines etched carnelian beads, copper antimony-reds.	
	3. Puran Qila (Delhi)	Period II	C. 600 to 200 B. C.	3. See under Punchmarked coin	
	4. Ahichchhatra (Uttar Pradesh)	a. Stratum VIII	C. 300 to 200 B. C.	4. a. Northern Black ware, grey ware, plain red ware with stamped designs, terracotta figurines of mother goddess of archaic type, <i>kuccha</i> structures, beads of etched agate, agate, carnelian, amethyst, glass.	4. a. The copper cast coins consisted of round ones with simple symbols. This stratum may be even earlier in date for stratum IX at Ahichchhatra yielded painted grey ware, which on modest estimate was given then a date earlier than 300 B.C. but which from the evidence of the excavations later on carried at Hastināpura, Bikaner, Rupar and
		b. Stratum VII	C. 200 to 100 B. C.	b. Same as above, Śuṅga terracottas, use of moulds in the preparation of figurines.	

in the suburbs of Delhi can reasonably be assigned to a period earlier than 600 B. C.
b. The cast coins, in addition to the previous type included square ones with elaborate symbols.

c. Cast coins in association with Pañchāla Mitra coins.

c. See under Pañchāla coins

c. 100 B. C. to 100 A. D.

c. Stratum VI and V

Cast Copper Coin

5. Kauśāmbi (Uttar Pradesh) Period II

c. 600 to 100 B. C.

5. Northern Black Polished ware, handmade human terracotta figurine, terracotta ringwell, first built road, evidence of use of kiln burnt bricks.

5. The cast copper coins appeared for the first time at the site in structural period I a of period II c. 300 B. C. and continued to be in use in later structural period also.

6. Hastināpura (Uttar Pradesh) Period III

c. 600 B. C. to 200 B. C.

6. See under Punchmarked coins.

7. Sonapur (Bihar) Period V

c. 1st century B. C.

7. See under Punchmarked coins.

8. Tamluk (West Bengal) Period II

c. 300 B. C. to 100 B. C.

8. Pottery closely similar to Northern Black Polished ware, unslipped red ware, moulded Śuṅga terracottas in large number.

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
9. Chandraketurgarh (West Bengal)		Period III	C. 1st century B.C.	9. Unslipped red ware, stone beads, antimony rods of copper.	
10. Śisūpāl-garh (Orissa)		a. Period II A	C. 200 B.C. to A.D. 100	10. a. Megalithic Black and Red ware, bright-red polished ware, terracotta ornaments, beads of semiprecious stones, iron objects, construction of chiselled laterite blocks, use of kiln burnt bricks in construction of building.	10. a. Can the black and red ware found at Śisūpāl-garh belong to the class of the chalcolithic black and red ware instead of belonging to the Megalithic fabric in which case the initial date of Śisūpāl-garh will go further back
		b. Period II B	C. 100 A.D. to 200 A.D.	b. See under Punchmarked coin-	
11. Ujjain (Madhya Pradesh)		Period II	C. 500 B.C. to 200 B.C.	11. See under Punchmarked coin.	
12. Tripurī (Madhya Pradesh)		Period III	C. 300 B.C. to 100 B.C.	12. Mud brick houses, red glazed ware, circular pottery ringwells, buff slipped ware, lead coin of Sirisatisa, local Tripurī coins of c. 3rd century B.C., punchmarked coin.	12. The cast copper coin of Tripurī was of the usual elephant and hill type. The local coin of Tripurī contained the legend Tripurī written in Brāhmī characters of 3rd century B.C.

13. Nasik (Bombay)	Period II B	C. 200 B.C. to 50 A.D.	13. Northern Black Polished ware.	
14. Maheswar (Madhya Pradesh)	Period IV	C. 400 B.C. to 100 B.C.	14. See under Punchmarked coins.	
Indo-Greek	Rupar	Period IV	Northern Black Polished ware (up to 2nd cent. B.C.), Śunga terracottas in lower levels, Kushan modelling in clay figures in slightly upper levels, bronze figure of Yājñika Brāhmaṇa, Gupta art influenced terracotta plaques in still higher strata, Gupta terracotta figurines, silver cup and ladle, silver utensils of ritual use, so called Kushāṇa pottery in layers of the early centuries of the christian era, clay sealings in script of the Gupta period, Indo-Parthian, Kushāṇa, Tribal, Local and Gupta coins.	a. The coins were found in the lower levels of the period ascribable to 2nd, 1st century B. C. The numismatic find included coins of the Indo-Greek king Antialcidas and a clay mould made from a coin of Apollodotus II.
Indo-Scythian	Taxila	Phase I (structural)	2nd half of the 1st century B. C.	See under Punchmarked coins. a. These were coins of Azes I. A coin of Azes or Azilises was also met with in structural phase IV, where it was evidently a survival.
Indo-Parthian	Rupar	Period IV	C. 200 B. C. to 600 A. D.	See under Indo-Greek coin. a. These were issues of Soter Megas.
Kushan	1. Taxila	a. Between phases	Earlier than the 2nd half	a. Restoration of walls of previous periods, the restored portion contained Kushāṇa king Kujulā Kad-

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
		II & III (structural)	of the 1st century A.D.	in both faces three vertical chases to receive wooden uprights, presumably to hold roofs, drains etc. indicative of developed forms of city planning, ivory comb carved with figures in the Mathura art tradition and having similarity with ivory plaques of Begram assignable to early centuries of the christian era. Also see remarks under punchmarked coins.	phises.
		b. Phase IV (structural)	2nd century A. D.	See remarks under Punchmarked coins, further elaboration of walls, drains etc.	b. This was a coin of Huvishka.
2. Rupar		Period IV	C. 200 B. C. to 600 A. D.	See under Indo-Greek coins.	2. The Kushāṇa coins found at Rupar were mainly of Vāsudeva and came from layers assignable to early centuries of the Christian era.
3. Mathura		Period III	C. 2nd century B. C. to 2nd century A. D.	Various types of beads in crystal, agate, carnelian, lapis lazuli, faience, jasper and shell, bone dice, stone caskets.	
4. Puran Qila		Period III	C. 2nd century B. C.	Excellently moulded terracotta figures of S'unga period (in earlier levels),	4. The Kushāṇa coins were found in the upper levels of

					to 3rd century A. D.	dull red pottery with a variety of stamped designs.	the period assignable to 2nd, 3rd centuries A. D.
5. Ahichchhatra	Stratum IV				C. 100 A. D. to 350 A. D.	5. A prosperous period of building activity, characterised by fine brick work, pottery marked by strong individual patterns e. g. bowls with incurved rims, jar with thick walls, bottle necked jars, sherds bearing stamped designs like nandipāda, svastikā, taurine, one mithuna Śuṅga plaque only, dwarf and other grotesque terracotta figures, stone sculpture of Maitreya and Buddha in typical Kuṣhāṇa art-style.	5. While the earlier stages of the stratum contained Kuṣhāṇa coins the last stage contained imitation Kuṣhāṇa coins as well.
6. Kauśāmbī	Period-III (Structural Period-6)				1st cent A. D. to 3rd cent A. D.	Kuṣhāṇa terracottas, figures of Gajalakṣmī, Haritī etc, seal with the legend <i>mahārājasya rājātī rājasya deva putrasya Kauśikasya prayoge</i> .	6. Coins of Kauśika, Huviṣka and Vāsudeva were all found from the period.
7. Siūpāl-garh	Period-II B				C. 100 A. D. to 200 A. D.	See under Punchmarked coin.	7. A copper coin of Huviṣka in regular stratum and a copper coin of Kauśika from an unstratified layer.
Imitation Kushan coin	1. Ahichchhatra	Stratum-IV			C. 100 A. D. to 350 A. D.	See under Kushan coins.	1. Were these imitations of Vāsudeva's coin?
	2. Hastināpura	Period-IV			Early 2nd cent B. C. to late 3rd cent A. D.	See under tribal and local coins.	2. These were imitations of coins of Vāsudeva.

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
3. Bikaner (Sarasvatī Drshadvatī valley) [Rajasthan]		Period-III	C. 3rd 4th century A.D.	3. Black on red painted pottery (Rangmahal Culture), Kushāṇa terracottas	3. These were imitations of coins of Vāsudeva, found mostly on the surface of mounds—mounds from where only objects assignable to Late Kushāṇa period could be recovered.
Imitation Kushan coin	4. Siśupāl- garh	Period-III	C. 200 A.D. to 350 A.D.	4. Building of laterite blocks, moulds of punch-marked coins, pottery generally crude and ill fired, polished bright red slip of preceding period giving way to a thin slip or wash of red or yellowish ochre, few rouletted sherds of coarse grey fabric, terracotta ear ornaments, iron caltrop and other objects of iron, clay bullae showing human heads closely imitating heads on Roman coins, rectangular lead coins showing standing lions, human heads, Ujjain symbol etc.	4. The imitation Kushan coins were divided into two classes. Class I represented the well known Purī Kushan coins whereas class II was represented by only one specimen which was an unique gold coin, showing the Kushan design of standing king and a Brahmi legend in characters of c.3rd cent A.D. on the obverse and a Roman head with a Roman legend on the reverse.
5. Jaugaḍā	Period-II	?	5. See under punchmarked coins.		5. The Purī Kushan coins were found scattered throughout the Period.

EVIDENCE OF INDIAN COINS

6. Pāṭali-putra (Bihar)	Period-III	C. 100 A.D. to 300 A.D.	6. Bowls and rimless carinated vases in red ware and coarse grey ware, miniature vases, terracotta figurines, ornamental terracotta objects, copper objects including antimony rods.	6. No Kushan coin, strictly speaking, was found from this period but a gold amulet was found fashioned after the coin type of Huvishka.
Tribal and Local coins				
a. Taxila	(i) Taxila	Prestructural level of Sirkap	Earlier than C. 50 B.C.	(i) See under Punchmarked coins.
	(ii) Rupar	Period IV	C. 200 B.C. to A.D. 600	(ii) See under Indo-Greek coin.
	(iii) Maheswar	Period IV	C. 400 B.C. to 100 B.C.	(iii) See under Punchmarked coin
b. Lanky bull, Kauśāmbī	(i) Kauśāmbī	Period III	C. 400 B.C. to 100 B.C.	(i) See under cast copper coin.
				(i) The lanky bull type coins were found from structural Period I b of Period II ascribable to c. 200 B.C. and were in use with cast copper coins
				(i) These local Taxila coins were found in all the phases of excavated Sirkap. Though originally of an earlier date, they were apparently in use throughout the Scytho-Parthian Kushāna period.
				(ii) The Taxila coins found at Rupar were assignable to an earlier level of the period ranging from c. 200 to 100 B.C.

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
	(ii) Pātali-putra	Period II	C. 150 B.C. to A.D. 100.	(ii) Structural remains of brick, terracotta soak wells, sherds of distinctive red ware and grey ware, tiles indicating nature of house roofs, sherds bearing symbols occurring on punch marked and cast copper coins, beads of semiprecious stones, terracotta figurines, pendants, ear ornaments, stone and terracotta sealings, bone arrowheads and pins.	which had their origin at the site at an earlier period. The lanky bulls, along with cast copper coins continued to be in circulation at the site up to c 50 B.C. when coins belonging to the 2nd group of Mitras of Kausambi also had come in use. In levels assignable to 2nd cent. B.C. Sunga terracottas and seals in Brāhmi characters of contemporary period were also recovered.
c. Pañchāla Mitra	Alchichhatra Strata VI & V		C. 100 B.C. to A.D. 100	First brick built structures at the site residential buildings, red ware pottery with types such as cooking pans, jars	These included coins of Pañchāla kings Phālguni Mitra, Bhūmi Mitra, Varu-

of gritty fabric, flat rimmed small jars, bowl shaped stoppers, copper cast coins, terracottas consisting of moulded Śūnga plaques showing female figures, mithuna etc.

na Mitra.

d. Mathura	(i) Hastinā-pura	Period IV	Early second century B.C. to late 3rd century A.D.	(i) Exclusively red ware industry, wheel turned, medium fabric, stamped design. From upper levels black on red painted pottery, bowls with incurved rims, spouted basins, button knobbed lids, kiln burnt bricks, regular house planning, antimony rods and other objects of copper, nails, axe, sickle of iron, Śūnga terracottas from lower levels, Bodhisattva Maitreya executed after Mathurā school of Kuṣāṇa sculpture from upper levels, terracotta toys, votive tanks, animal figurines, inscribed potsherds and seal, rings and beads.	(i) Coins were noticed throughout the period from the lower levels came Mathura coins of Śeṣadatta (C. 2nd Cent. B. C.) middle layers the coins of the Yaudheyas (C. 1st Cent. A.D.), and imitation Kuṣāṇa coins (C. 3rd Cent. A.D.) from upper levels.
	(ii) Rupa	Period IV	C. 200 B.C. to A.D. 600	(ii) See under Indo-Greek coin.	(ii) These coins were found from lower levels of the period, ascribable to c. 200 to 100 B.C.
(d) Mathura	(iii) Puraṇ Qila	Period III	C. 2nd century B.C. to 3rd century A.D.	(iii) See under Kushan coins.	(iii) The Mathura coins were found in the lower levels of the period along with Śūnga terracottas.
(e) Kauśāmbī Mitra	Kauśāmbī	Period III (structural)	C. 100 B.C. to A.D. 100	(e) Inscribed seals, terracotta figurines illustrative of Śāka Parthian con-	

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
(Second group of Mitras)		period 4 and 5)		tact, brick lined pits used as sewage recepticals, brick built opened and covered drains,	
(f) Kuṇḍa	Rupar	Period IV	C. 200 B.C. to 600 A.D.	(f) See under Indo-Greek coins.	(f) In layers ascribable to c. 100 B.C. to A.D. 100.
(g) Audum- bara	Rupar	Period IV	C. 200 B.C. to 600 A.D.	(g) See under Indo-Greek coins.	(g) In layers pertaining to C. 100 B.C. to A.D. 100.
(h) Yaudheya	(i) Hastina- pura	Period IV	Early 2nd century B.C. to late 3rd century A.D.	(h) (i) See under Mathura coins.	
	(ii) Puran Qila.	Period III	C. 2nd cen- tury B.C. to 3rd century A.D.	(ii) See under Kushan coins.	(h) (ii) In middle levels of the period.
(i) Ujjain	(i) Amreli	Period II (Phase I)	1st cent B.C. to 1st cent A.D.	Punchmarked coins	(i) The coin bearing Ujjain symbol was found from the lower levels of the period.
	(ii) Maheswar	Period IV	C. 400 B.C. to 100 B.C.	See under Punchmarked coins.	

(j) Acyu	Abichchhatra Stratum III	A.D. 350 to 750	(j) Terraced brick temples, temple with ancillary structures and shrines, large size terracotta images of Brahminical deities, moulded plaques in typical Gupta art style, beads of semi-precious stones, glass and terracotta, predominance of mould made pottery types.	(j) The 'Acyu' coins were found in the earliest stage of this stratum.
(k) Magha	Kausāmbī	Period III (Structural sub-period) 6 and 7)	(k) Inscribed seal.	
(l) Gaṇendra	Kausāmbī	Period III (Top of sub-period 8)	(l) Inscribed seal.	
Āndhra	1. Brahma-puri (Bombay)	3rd century B.C. to 1st century A.D.	1. (a) Northern Black Polished ware.	(a) The coins of this period included the issues of early Śātavāhanas. One of these has got the legend <i>Śātakaniśa</i> in Brāhmī script of about 200 B.C.
	(b) Period II 1st to 3rd century A.D.		(b) Pots bearing kaolin slip on them, Salmon or red surfaced Roman ware, clay vessels imitating Roman bronzes, kaolin covered terracotta figurines, inscribed seal in letters of the 2nd century A.D., terracotta bullae showing imitation of Roman coins, fine brick houses.	(b) These include coins of the Imperial Śātavāhanas like Gautamīputra and Śrī Yaśa.

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
2.	Chandra-valli (Mysore)	Period II	1st century to 3rd century A.D.	2. Rouletted ware, pottery sometimes apparently salt-glazed, with rectilinear decoration in white pigment under a wash of russet coloured ochre, glass bangles, Roman denarii of 1st century A.D., polished red ware, brick built wall, underground drain.	2. Include coins of Śrī Yājña Śātakarṇi C. A.D. 169-196, Mahārathis, Chutus, and uninscribed bead and potin coins. While the dated coin was found in stratum 6 others were found mostly in earlier strata and therefore may approach a chronological horizon reaching as early as the 1st century B.C. A coin of Pulumāvi was also recovered from the site, but could not be connected with the stratigraphy of the main cutting.
Andhra	3. Nevasa. (Bombay)	a. Period IV	3rd century B.C. to 1st century A.D.	3. a. Houses of uncut timber, brick for flooring, walls and wells, tiles for roof, iron sickles, daggers, spear heads, plough shares, wheat and pulses, beads of clay, glass, paste, faience, steatite and semi precious stones, black and red ware, Northern Black Polished ware (rare), plain red ware.	
		b. Period V	1st to 3rd century A.D.	b. Red Polished ware, coin of Tiberius, Mediterranean amphorae, fine,	

translucent light blue glass bangles and beads.

- | | | | | |
|----------------|-------------------------------------|---------------------------------------|--|---|
| 4. Nasik. | Period II B. | C. 200 B.C.
to 50 A.D. | | 4. A coin, probably of Śātakarṇi, was found from a late layer of the site, but might have originally belonged to period II-B. and survived at a later stage. |
| 5. Tripurī | Period III | C. 300 B.C.
to 100 B.C. | 5. See under copper cast coin. | 5. A large lead coin with a marginal legend Rāṇo Siri Satisa which was found from this period might have belonged to Śātavahana Śātakarṇi I or II. |
| 6. Maheswar | Period IV | C. 400 B.C.
to 100 B.C. | 6. See under Punchmarked coin. | 6. This is a doubtful specimen. |
| Cont
Andhra | 7. Nagarju-
nakonda.
(Andhra) | 2nd cent
A.D. to 4th
cent A. D. | 7. Roman denarii, brick and stone built structures, stone sculptures, terracottas, black polished ware, (not N.B.P.), black and red ware, plain red ware, sometimes with decorative designs. | 7. If palaeoliths and neoliths found at the valley represent the first two periods and the megaliths, the third the early historic culture of 2nd-4th century A.D. may be called period IV of the valley. |

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
Ikshvāku	Nagarjunakonda	Period IV	2nd cent. A. D. to 4th cent. A. D.	Same as above.	The Āndhra coins include those of Yājña Śātakarṇi and Pulumāvi.
Western Kshatrapa	a. Baroda. (Bombay)	Period II	2nd cent. A. D.	Red Polished ware.	These are lead coins of Ikshvāku kings Siri Virapu (risadata) and Siri Chata (Mula).
	b. Amreli	Period II (Phase 2to5)	2nd cent. A. D. to 4th cent A. D.	Red Polished ware, seal with legend in characters of the 3rd to 4th century A. D.	
Gupta	a. Rupar.	Period IV	C. 200 B.C. to A.D. 600	a. See under Indo-Greek coin.	a. The Gupta coin, found at Rupar belonged to the Chandra Gupta Kumāradevi type and was recovered from the upper levels of the period.
	b. Mathura	Period V	4th cent. to 6th cent. A.D.	a. Terracotta sealings and terracotta figurines characteristic of the age.	

ihūna	Rupar	Period V	C. 800 to 1000 A.D.		This was a coin of Mihirakula (c. 510 to 540 A.D.) which was evidently a survival in a subsequent deposition.
Gādhia	a. Baroda.	(i) Period III	C. 7th to 10th cent A.D.	Mediæval painted pottery	
		(ii) Period IV	13th to 14th cent A.D.	Islamic glazed pottery	(ii) This was found in a spoil pit.
Śilāhāra	b. Ahichchhatra	Stratum I	A.D. 850 to 1100	See under Ādivarāha coin.	
	Brahmapurī	Period III	11th to 12th cent A.D.		
Ādivarāha	Ahichchhatra	Stratum I	A.D. 850 to 1100	Blocks of residential buildings separated from each other by streets and lanes large cooking jars, single spouted jars, ring stand of large size bowls with wide open mouth, thin wall, knife edged rim and body corrugated by the wheel, pedestalled bowls, terracottas showing <i>mallas</i> , thin plaques of deities, Salti-Satta stones, coins of Gādhia and Śrī Vīgra types.	
Śrī Vīgraha	Ahichchhatra	Stratum I	A.D. 850 to 1100	As above.	

Type and class of coin	Site	Stratified position of the period	Date of period	Associated cultural equipments	Remarks, if any
Prasanna mitra of Sarabhapura Dynasty	Sirpur (Madhya Pradesh)	Period I	5th to 6th cent. A.D.		
Ratnadeva of Kalachuri Dynasty	Sirpur	Period III	11th century A.D.		
Roman or Imitation Roman	(a) Chandra-valli	Period II	1st to 3rd century A.D.	See under Āndhra coin.	(a) The coin found as a result of stratified digging of 1947 was one denarius of Tiberius (C.A. D. 26-37)
	(b) Nevasa	Period V	1st to 3rd century A.D.	See under Āndhra coin.	(b) The coin recovered here was a lead coin of Tiberius, perhaps an imitation.
	(c) Nagar junakonda	Period IV	2nd to 4th century A.D.	See under Āndhra coin.	(c) One of these was a Roman aurei belonging to Tiberius (A. D. 16-37), another belonged to Faustina the Elder, mother-in-law of Marcus Aurelius and queen of Antonius Pius and was issued after A. D. 141.
Ghiyasuddin Balban,	Hastināpura	Period V	Late 11th to early 15th	Muslim glazed ware, plain red ware, coarse to medium grained, glass bangles,	The coin was found from a middle level of the period

Sultan of Delhi			century A.D. structure of brick bats collected from previous periods, various iron objects.	and therefore the layer in which it was noticed could be broadly assigned to the close of the 13th century.
Sultans of Gujrat	Baroda	Period V	1300 to 1600 A. D.	These were coins of Ahmed Shah (1410-1443 A. D.) and Muhammad Beghra (1458 to 1511 A. D.)
Bahamani kings	(a) Bahmani puri	Period IV	15th century A.D.	(a) These were coins of Bahamani kings Ahmed Shah II, Mahmud Shah II, and Shah bin Muhammad.
	(b) Nevasa	Period VII		(b) Fine polychrome glass bangles.
Mughal	(i) Bahmani puri	Period V	18th century A. D.	(i) This was a coin of Aurangzeb found more or less on the Period suggested but not definitely indicated by firm occupational layer.
	(ii) Rupa	Period VI	13th to 17th century A.D.	(ii) Polychrome glazed Islamic ware, lakhauri bricks.
	(iii) Pāṭali-putra	Period V	1600 A.D. and later	(iii) A coin of Shah Alam was recovered from the period.
Qutab Shahi	Nagarjuna-konda	Period V (?)	1600 A. D. and later	Reported as excavated from upper strata.
Gaekwad	Baroda	Period VI	19th century	A coin of Khanderao Gaekwad.

TABLE II

REGIONAL DISTRIBUTION OF COINS IN STRATIGRAPHIC AND CHRONOLOGICAL CONTEXT.

KEY TO ABBREVIATIONS USED IN TABLE No. II.

Punch-marked	= P. M.	Western Kshatrapa	= W.K
Cast Copper	= C. C.	Gupta	= G
Indo-Greek	= I. G.	Hūṇa	= Hu
Indo-Scythian	= I. S.	Gadhia	= Gd
Indo-Panthian	= I. P.	Śilāhāra	= Si
Kushāṇ	= K	Ādi-Varāha	= A.V.
Imitation Kushāṇ	= K(i)	Śrī-Vigraha	= S. V.
Taxila	= T	Prasanna-mitra	
Lanky bull, Kauśāmbī	= K(b)	of Sarabhapura	
Pañchāla Mitra	= M(p)	dynasty	= S(p)
Mathura	= M	Ratnadeva of	
Kauśāmbī Mitra	= M(k)	Kalachuri dynasty	= K(r)
Kuṇḍa	= Ku	Roman or	
Audumbara	= Au	imitation Roman	= R
Yaudheya	= Yau	Ghiyasuddin Balban	= B(m)
Ujjain	= U	Sultans of Gujarat	= G(m)
Achyu	= Ac	Bahmani Kings	= B(d)
Magha	= Ma	Qutb-Shahi	= Q. S.
Gaṇendra	= Ga	Gackwad	= G(b)
Andhra	= A	Mughal	= Mu.
Ikshvāku	= I		

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